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ABSTRACT

Using data from the 1980 Census Public Use Microdata Sample, this paper examines characteristics of women who live alone and incidence of poverty in this group. Results show there are two distinct subgroups among women who live alone: the elderly, most of whom are widowed; and the young, many of whom are single or divorced. For both groups, about one in four is living in poverty. Small town and rural women are more likely to be poor than central city women. Least likely to be poor are women who live in suburbs. Nonwhite women are more likely to be poor than white women. There is a curvilinear pattern with age, with two-thirds of women under 20 and those 80 and older living in poverty. In a multivariate analysis of younger women, employment, education, and age explain most of the variance in proportion in poverty. Education, having multiple sources of income, and race are the strongest explanatory variables for older women. Women have greater chances of living in poverty due to lower wage scales and dependence solely upon widow benefits. Government programs aimed at the elderly poor often fall short of raising them out of poverty. References, data tables, and graphs are appended. (Author/NEC)

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DETERMINANTS OF POVERTY AMONG RURAL AND URBAN WOMEN WHO LIVE ALONE

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Abstract

This paper examines the characteristics of women who live alone, and the incidence of poverty in this group. Data from the 1980 Census Public Use Microdata Sample (PUMS) are utilized.

Results show there are two distinct subgroups among women who live alone: the elderly, most of whom are widowed; and the young, many of whom are single or divorced. For both groups, about one in four is living in poverty. Small town and rural women are more likely to be poor than are central city women. Least likely to be poor are women who live in the suburbs. Nonwhite women are more likely to be poor than white women. With age, there is a curvilinear pattern, with two-thirds of women under 20 and those 80 and older living in poverty.

In a multivariate analysis of younger women, employment, education and age explain most of the variance in proportion in poverty; for older women, education, having multiple sources of income, and race are the strongest explanatory variables. The conclusions note that women have greater chances of living in poverty due to lower wage scales and dependence solely upon widow benefits.

Introduction

Since the 1980 Census, it has become popular to discuss the "feminization" of poverty. The 1980 data revealed that women who headed households and the children living in their households were at great risk of being impoverished. Often overlooked in this discussion are women who live alone, without spouse, children or roommate. These women also contribute to the "feminization" of poverty. In order to better understand this group, we need to examine both the aspect of living alone and the aspect of poverty.

The literature suggests two theories as to why persons live alone. The first is an economic one, well stated by Michael et al. (1980). They propose an economic "consumer demand" model. That is, individuals make the decision to live alone "... as a reflection of an economic demand for privacy or autonomy." Thus the propensity to live alone depends on economic sufficiency. The higher the income, the more likely each person will be able to realize an interest in privacy or autonomy.

Various studies of the prevalence of persons living alone in the United States have shown that the proportion is increasing. For example, Frey and Kobrin (1982) note that the proportion of persons in nonblack households who are primary individuals went from 14.7% in 1960 to 19.4% in 1970, to 21.5% in 1975. Only a very small proportion of primary individuals live with others. Michael et al. (1980) attribute this trend to the increasing standard of living in the United States.

The second theory about persons living alone pertains to demographic changes in the structure of the population. The recent increase in persons living alone is attributed to a combination of factors, summarized by Kobrin (1976): 1) a decline in fertility, with the result that parents have dependent children living with them for fewer years; 2) a decline in mortality, resulting in survival of parents long after their children leave home; 3) the sex difference in survival rates means that an increasing proportion of women live in the "widowed" state, and do so for longer periods of time; 4) a decline in the prevalence of the extended family, which means that unmarried and widowed relatives are less likely to live with a family; 5) a decline in the presence of unrelated individuals (e.g., boarders, lodgers, servants) in the family home.

Additional factors contributing to the increase in persons living alone are: an increase in age at marriage, so that young people may leave their parent's home, but not immediately form family units of their own; an increase in the proportion of women who remain childless, producing a group of women who, when elderly, will have few family members to live with; an increase in the proportion of marriages ending in divorce or separation, which divides one household into two, and often leaves one spouse living alone. Other factors include an increase in the housing stock for single persons; increasing acceptance of alternative life styles, no longer just in urban areas, but spreading into small towns and rural areas; and finally, the increasing prevalence of single-person households which may generate momentum toward more of such households (Pampel 1983: 446).

Why are persons who live alone more likely to be in poverty? The specific factors vary, depending upon the age and life-stage of the individual. However, the U.S. government determines poverty status by

examining total family income and comparing it to a minimum income level needed to meet all basic needs at a minimum level. When there is only one person in the household, the characteristics of that person's ability to earn income are the critical determinants of poverty status.

Here, we start to see the differences between men and women. Women, on average, when working, earn less than men. They tend to work less than full time, or not all weeks of the year; they tend to work at lower paying jobs. In addition, many older women never worked, but depended on their husbands for their economic security (Warlick, 1985). Thus, when a marriage is broken by death or divorce, the woman frequently is left with minimal resources. Data supporting these statements are found in Minkler and Stone (1985).

Purpose of Study

The study of households and families in poverty is often complicated by the fact that most households include both earners and nonearners. Nonearners are often dependents, such as minor children, but can also be potential earners. This study focuses on women living alone, permitting us to examine relationships between poverty and various characteristics of these women without being concerned with the possible additional contribution of other persons to the household's income.

Women alone provide a unique case for clear examination of the correlates of poverty. This is not to say, however, that these women represent an exception or a group of minor importance. The number of women living alone has increased since 1980 and we expect it will continue to increase. This growth is due in large part to the continuing increase in the elderly female population.

This paper will examine characteristics of this somewhat overlooked population of women--those who live alone. We will examine their age, race,

marital status, education, labor force status, sources of income and place of residence as related to living in poverty. Finally, we will place all of these characteristics in a multivariate model to explain the likelihood of a woman living in poverty.

Data Source

The 1980 Census of Population and Housing provides a wealth of data for the analyst in the Public Use Microdata Samples (PUMS). For this research, the 1 percent C-Sample, a stratified sample of all households responding to the long-form questionnaire, was used. Only persons living in households were analyzed, excluding those in group quarters and institutions.

The first step in constructing the data set for this research was to draw a stratified sample of all households with female householders from the PUMS C-Sample. This sample was stratified by urban/rural location of residence, in order to oversample the rural areas. Ten percent of urban households with a female householder were selected along with 20 percent of rural households with female householders. The resulting sample sizes were, respectively, 18,725 (urban) and 7,594 (rural), for a total of 26,319 households headed by a female.

These samples were then weighted to return them to the proportions that they represent in the population. The weight[1] applied to urban cases was 1.1686; rural cases were weighted by 0.5843. The result was 21,882 urban

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1. The weight was calculated in a two-step process. In the first step, a "mean" weight for the entire sample was calculated:
   a. 10% urban sample N = 18,725
      20% rural sample N = 7,594
      Total sample N = 26,319
   b. To calculate the mean weight, the sample Ns must be weighted to represent the actual proportions in the population.
      Urban = 10(18,725) plus Rural = 5(7,594) = Total Reconstructed N = 225,220
   c. To calculate the mean weight, 225,220 / 26,319 = 8.5573 (mean weight). The second step is computation of adjusted weights, based on the stratified sample:
      urban adjusted weight = 10/8.5573 = 1.1686
      rural adjusted weight = 5/8.5573 = 0.5843

households and 4,437 rural households (a total again of 26,319 households). Then women living alone were selected from the weighted sample. This subgroup was defined as households with female householder and only one person living in the household; that is, women living alone. The resulting final sample used for this analysis included 13,066 women living alone, with 10,766 in urban areas and 2,300 in rural areas. These women are an 11.76 percent sample of the PUMS-C sample population of women living alone. These women represent 11,126,900 women living alone in 1980, according to the Census findings (U.S. Bureau of the Census, 1984). The Census reported that 17.4 percent of women alone lived in rural areas while the sample used here is 17.6 percent rural. In comparing characteristics of the sample constructed for this research with published Census data, it appears that our sample is very close to the total group of women living alone in 1980. To inflate our numbers to the total population of 11.1 million, multiply by a factor of 851.59.

Using the 1980 Census has some advantages and disadvantages.

<u>Disadvantages</u>

1. Our sample includes women who lived alone in April 1980. However, their poverty status is determined by their income in 1979. We don't know if their 1979 income matches their living arrangement in 1980. We make this assumption.
2. We have no information about how long or why they lived in a one-person household.
3. Since our analysis is based on cross-sectional data we cannot infer how temporary or permanent their current living arrangement is. That is, whether the women who lived alone in April 1980 experienced a change in marital status (i.e., became widowed) at their long-time residence, or whether they lived in that location as a one-person household for a long time.

Advantages

1. We have data about all sources of income, to compare those who live in poverty and those who are not in poverty.
2. We have data about individuals, and can correlate age, marital status, race, educational attainment, employment, occupation, etc. with poverty status.

Characteristics of Women Who Live Alone

As mentioned above, our data set is drawn from the 1980 Census, which found 11,126,900 women living alone in households. Our weighted sample of the PUMS data includes 13,066 women living alone. The youngest of these women is 15 years old and the oldest is over 90 years. Their age distribution emphasizes the elderly group, with half the women age 65 and older, and 61 percent between the ages of 50 and 80. The median age is 65. The age distribution of this group is displayed in Table 1.

Additional descriptive data is given in Table 2. Eighty-eight percent of women living alone are white and 9.9 percent are black. The remaining racial categories are each less than one-half percent. The total Asian group is 0.9 percent; all races other than white and black total 2.1 percent. For subsequent analyses, the racial categories will be white and nonwhite, which is predominantly, but not entirely, black.

In terms of marital status, 54.3 percent of women living alone are widows. Single women are the second largest group at 23.2 percent, followed by divorced, separated and married, not living with their husbands, at 22.5 percent. Of course, this is a very unusual marital status pattern for adult women, but not unexpected given their household status and age distribution.[2]

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2. In this analysis, we have combined married, not living with spouse, with divorced and separated women because they are only 2 percent of the total group, and all are in the similar position of having been married but not currently living with a spouse.

Almost 60 percent of the women have completed high school or more education, while 4.5 percent are functionally illiterate with less than 5 years of formal schooling. The distribution of completed years of education is displayed in Table 2.

The labor force status of women living alone also reflects the age distribution: 57.6 percent are not in the labor force, 40.7 percent are employed, 0.1 percent are in the armed forces,[3] and 1.6 percent are unemployed. The unemployment rate for those in the civilian labor force was 3.8 percent in 1980. A slightly larger proportion (45.5 percent) of women had been employed in 1979 than were employed at the time of the census. While 9.5 percent of the women have never worked at a paid job, 42.2 percent had worked some time in 1980 and the remaining 48.3 percent had last worked prior to 1980. Over half of this latter group last worked before 1970.

The Census provides information on the residential location of these women in four categories:

Within Urbanized Area (UA)
1. Central City
2. Remainder of UA

Outside Urbanized Area
3. In places 2,500+
4. Remainder of Area

For purposes of this paper, we re-label these four categories as central city; the remainder of the urbanized area as suburbs; outside urbanized area in places of 2,500 or more are small towns; and the remaining area is called rural. Rural includes small places of less than 2,500 persons as well as scattered farm and nonfarm households.

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3. Because the armed forces group is so small it will be combined with the group of employed women for subsequent analyses.

The characteristics of women living alone can be described for these four residential categories. On the average, women living alone in central cities tend to be younger (median age is 62) than the total group of women alone. They are more likely to be single, divorced or separated (52.8 percent vs. 44.3 percent for total group), a larger proportion are black (15.9 percent) than in the total group (9.9 percent) and a larger proportion participate in the labor force (46.8 percent) than in the total group (31.8 percent).

Women living alone in suburban areas are, in general, similar in age and marital status distribution to the total group; the proportions divorced and single are only slightly larger, and suburban women are slightly younger (median age is 63) than the total group of women living alone. They are predominantly white (93.3 percent vs. 88.0 percent for total group) and about 5 percent more of this group than the total group are in the labor force.

The characteristics of women alone in the rural areas and in small towns are very similar overall. Their age distribution is older than that of the total group, with a median of 68 years for both residential area types. They are much more likely to be widows, even more so in the rural areas (70.5 percent and 63.4 percent in small towns). The proportion of white women (over 90 percent) is greater than the overall proportion. And these women are much less likely to be in the labor force.

Women Under Age 65 and 65 and Older

The total sample of women who live alone can be divided into two equal parts; one part comprised of women under age 65, the other, women 65 and older. There are 6,530 women under age 65 and 6,536 women 65 and over in this sample. These two groups are distinctly different from each other in a number of ways.

Of the women under 65, almost half are age 50-64. When these women are separated by residence, it is clear that the younger women tend to live in the central city and suburban areas while the older ones concentrate in small towns and rural areas. For the group aged 50-64, 41 percent live in central cities, 44 percent are in suburbs, 55 percent are in small towns, and 60 percent are in rural areas.

Among the women who are 65 or older, 75 percent are age 65-80. Compared to the younger women, all of the elderly women are more likely to live in rural areas (21 percent vs. 14 percent) and small towns (17 percent vs. 12 percent).

Table 2 presents characteristics of women in the two age groups. In terms of race, women under age 65 are more likely to be nonwhite than are the older women. Marital status presents the most dramatic differences between these two groups, with over 80 percent of the elderly group widowed. The women under 65 are more likely to be single (39 percent) or divorced or separated (35 percent). Graph 1 visually presents these differences in marital status. The younger group of women is also more highly educated than the older group, with 75 percent having a high school education or better while 40 percent of the elderly have achieved the same level.

As would be expected, the women under age 65 are much more likely to be in the labor force than are those 65 and older. While 76 percent of younger women are in the labor force, only 9 percent of women 65 and older are in the labor force. Slightly larger proportions of each group had worked at some time in 1979: 78 percent of younger women and almost 13 percent of older women.

It is interesting to examine the occupational and industrial classification of women who worked in the previous year by urban vs. rural residence. Urban residence includes women in central cities and suburbs while

rural includes small towns and rural areas. Table 3 shows these figures. Urban women tend to be employed in higher paying occupations than rural women. Note that 5 percent fewer rural women are employed in the managerial and professional category, and 11 percent fewer rural women are in the technical, sales and administrative support category. This is balanced by 8 percent more of the rural women being employed in the lower paying "service" category and 7 percent in the operator, fabricator, and laborer category. Thus even though approximately the same proportion of urban and rural women work, rural women are disproportionately working in lower paid jobs.

The industrial classification mirrors this picture. More rural women are employed in agriculture, manufacturing, and services whereas there is a greater proportion of urban women in finance, insurance, and real estate. Although not shown here, the proportions of women working part-time (less than 35 hours per week) and working less than 50 weeks in 1979 are considerably higher for rural women compared with urban women.

The sources of income for these two groups of women are very different. The 1980 census long form asked seven questions about specific sources of income, such as wages, social security, and public assistance. The proportion of women receiving income from each source is detailed in Table 4, along with the proportion who rely on one source of income only. It is immediately apparent that younger women rely on wages and salaries while older women rely on Social Security. Approximately half of the younger women have only one source of income for 1979 while one-third of the older women have only one source. In other words, older women are more likely to have multiple sources of income.

Among women who have more than one source of income, there are over 60 different combinations of the seven income sources. A few combinations are

dominant and many other combinations are represented by very small numbers of women. Among women under age 65, wages and salaries plus interest, dividends, and net rent are the income sources for 23.? percent while 9.2 percent have combinations of sources that include no wages or salaries. For women 65 and older, 23.6 percent have income from Social Security and interest, dividends, and net rent. Another 3.4 percent have combinations of sources that do not involve Social Security at all.

Poverty Among Women Who Live Alone

About 25 percent of all women who live alone, live below the poverty threshold. If we add the near poor (those who have incomes below 125 percent of the poverty level), this figure rises to 36 percent. The income amounts that represent these cutoff points in 1979 were:

	Poverty Level:	
Age	100%	125%
Under 65	$3774	$4717
65 and over	$3479	$4349

In this analysis we will use 125 percent of the poverty level to represent those living in poverty. One important reason for this is that many states add "supplemental security income" (SSI) to Social Security payments in order to bring recipients' yearly income just above the poverty level. Thus, a sizable number of older persons are not considered to be in poverty, unless the 125 percent level is used to define poverty status. And, of course, the levels of income that were considered the basic minimum for one person living alone were extremely low, even when considering the near-poor poverty level.

Characteristics of Women Living Alone in Poverty

Within the group of poor, there is considerable diversity. First of all, there is a difference by age. For women less than 65, about one in four (25.5 percent) were living in poverty; the rate for those 65 and over is almost double that (47.3 percent). Graph 2 depicts a U-shaped distribution by age.

Both the very young (those under 20) and the very old (those 80 years or over) have very high rates of poverty. Of particular interest in this analysis is the prevalence of poverty among women by different types of residence. Graph 2 also displays the poverty rates by age for each of the four residence areas. All follow the U-shaped curve. However, for most ages, the small town and rural residents have higher rates of poverty than those who live in the central city and suburbs. Suburban women at every age have the lowest proportions in poverty. Table 5 presents details.

Race is also associated with living in poverty. The rates for nonwhite women are more than double those of white women, at both the younger and older ages. Three out of four nonwhite older women live in poverty.

Poverty also varies by marital status. Among women living alone of all ages, single women have the lowest proportion in poverty; those who are widowed have somewhat higher rates, and those in the category "divorced, separated, or married, spouse absent" have the highest proportion in poverty. Previous research (Duncan, 1984) has indicated that marital disruption is one of the main causes of a woman falling into poverty.

Table 6 presents the proportion of women in poverty by selected characteristics and age. In both the younger and older groups, single women have the lowest proportion in poverty, and widowed the greatest proportion. Although not shown, we contrasted those women who were separated and divorced with those who were married but living alone. For both age groups, women who were married had much higher proportions in poverty than women who were divorced or separated. This gives credence to the suggestion that women who are deserted or not living with their husbands are less likely to have adequate income to meet minimal standards.

Education is traditionally correlated with income. Therefore, we would expect that poverty status would also be linearly associated with education. Graph 3 demonstrates this fact. For both younger and older women there is a consistent relationship with poverty status and education, measured here by grade completed in school. It is also interesting to note the sizable drop in proportion poor when the level "high school graduate" is reached. Apparently, having the high school diploma reduces a woman's chances of falling in poverty, especially among younger women.

Finally, since living in poverty is determined only by the yearly income in 1979, one of the strongest associations with poverty is whether or not the woman was employed. For both younger and older women, if the woman worked she was much less likely to live in poverty. And, women who were not in the labor force were most likely to live in poverty. Those who were considered "unemployed," but in the labor force, had lower levels of poverty than those not in the labor force.

Sources of Income and Poverty

In order to examine correlates of poverty, we devised a method of summarizing the many combinations of seven income sources into five categories. These five categories differ for the two age groups -- under 65 and 65+. For the younger women, the five are:

1. No income source
2. Wages, salaries only
3. Only one source of income, not wages
4. Combination of sources, one of which is wages, salaries
5. Combination of sources, not including wages, salaries

The five categories of income source for older women follow the same pattern, except that Social Security, instead of wages, is the differentiating source. The categories are:

1. No income source
2. Social Security only
3. Only one source of income, not Social Security
4. Combination of sources, one of which is Social Security
5. Combination of sources, not including Social Security

These five categories for each age group are listed in Table 7 along with the proportion in poverty. It is apparent that younger women without wage or salary income are much more likely to be poor than their counterparts who have wages. Of course, women with no income source are poor by definition. The pattern among elderly women is somewhat different. The key element in staying above the poverty level appears to be having a combination of income sources; older women with a sole source of income are much more likely to be poor. While Social Security for the old can be compared to wages for the young, it does not, by itself, provide enough income to raise most elderly women above the poverty threshold. Social Security in combination with other sources, however, is sufficient to keep many more women out of poverty. These results are also shown in Graph 4.

The women who had no source of income in 1979 are a small group -- 2.3 percent of the total. We can only speculate on the individual circumstances of these women, but they are an interesting group to recognize in describing the poor population. It is important to remember that some of these women may have had income sources that were not asked about in the Census, such as lump sum payments from insurance policies or estates, gifts from family members, and non-monetary support such as gifts of food from friends or charities. It

seems likely that some of these women actually had no cash income at all, but a more accurate name for this group is "women with no source of income received regularly," or women with no regular income. It is also important to note that assets or wealth are not taken into account here since the Census provides no information. Certainly, some of the women living alone have substantial assets in real estate or businesses and other types of property. Whether any of the poor women or women with no regular income are among the asset-wealthy group is an unknown factor; we can assume that even after assets are accounted for, poverty would remain a problem for many of these women. Radner (1984) has examined the net worth of elderly people and determined that wealth is distributed very unevenly. He notes that 24 percent of elderly households are in the lowest quintile of both income and net worth, and that a disproportionate share of households with low net worth are headed by a woman, and are single person households.

As a group, women with no regular income are slightly younger than the total group of women living alone. In particular, 31 percent of women with no income are in the 50-64 year-old group, while only 23.2 percent of the total group are of these ages. An even more striking difference between women with no regular income and the total group of women is their race distribution; 22.5 percent of women with no regular income are nonwhite, compared to 12 percent of the total group. The educational attainment of this group is somewhat lower than that of the total group, with 51.3 percent having less than a high school diploma, compared to 42.9 percent of the total group. Women with no regular income are also more concentrated in the central city (51.2% vs. 39.5% for total group). This small but intriguing group of women deserve more careful study than is possible in this analysis.

Multivariate Analysis

We now turn to an effort to explain poverty status by examining all of the contributing factors together. The method used to determine this is Multiple Classification Analysis (Andrews, 1973). This technique is similar to dummy variable regression analysis, and is appropriate when the dependent variable is bi-variate. This technique is also appropriate when some of the independent variables have a curvilinear relationship to the dependent variable, as does age in this data set; or when some variables are categorical, as is type of residence. In the present research, our dependent variable is whether or not the woman's 1979 income fell below the 125% level of poverty, as determined by the U.S. Bureau of the Census.

Table 8 displays the results in two parts. Two separate models were run, one for women under 65 years and one for 65 years and over. Looking first at the model for women under 65, we note that the proportion in poverty in this group is 26 percent (the grand mean). Results are displayed as deviations from this mean value for each category of each independent variable.

The first column gives the numbers of cases in each category. The second column presents the unadjusted deviations from the grand mean. These results are consistent with what was described above in the poverty section. That is, for place of residence, women who live in suburbs have the lowest proportion in poverty, and women who live in small towns or rural areas have the highest. The very young (under 20) have higher proportions in poverty than any other group under 65; nonwhites have much higher rates of poverty than whites; widows have higher proportions than those who are single or divorced; there is an inverse relationship between educational attainment and poverty, with a sharp drop between having some high school and being a high school graduate; and finally, those who had no source of income were categorically

poor whereas those who had wages or wages plus other income were less likely to be in poverty.

The third column marked "adjusted deviation from the mean" provides the deviations that are calculated after adjusting for the effects of all of the independent variables in the model. It is interesting to note that in all variables the range of proportions in poverty have decreased. However, they remain strong in two variables: sources of income in 1979 and education. Following this, the young women under 20 and nonwhites still exhibit high rates of poverty. The multiple correlation for this model is .593, and about 35 percent of the variance in poverty status is explained.

Turning to the second part of Table 8, women 65 and older, we note very similar patterns with residence, race, marital status, and education. For source of income, we see that once again, those with no regular source are categorically poor followed by a high proportion of those with Social Security income only being poor. Those with more than one source of income are least likely to be in poverty. As for age, here we note that women who are 80 or older are much more likely to live in poverty.

The second model, showing the adjusted deviations from the mean after controlling for all of the independent variables in the model, does not appear very different from the unadjusted model. That is, the deviations from the mean for most variables do not change. The order of importance in contribution to explained variance is somewhat different comparing the older with younger women. The strongest predictors for older women are source of income, education, and race. This compares with source of income, education, and age for younger women. The multiple regression correlation is .586 for the older women, and the proportion of variance explained is 34 percent.

Conclusions

Women living alone are a diverse group, ranging from single women pursuing careers in large cities to very old widows living on social security in rural areas. This diverse group includes women who have chosen to live alone and those who have been left alone through dissolution of marriage. This group includes women who have raised families, and never worked outside the home, women who have been employed at times, and women who have been in the paid labor force for many years.

The diversity of this group is reduced by dividing women living alone into two age groups - those under 65 and those 65 and older. While each of these groups is more homogeneous than the total group, each group continues to be diverse. For example, women under age 65 include teenagers living alone as well as 50 year old divorced women. The elderly are somewhat more homogeneous in that the vast majority are widowed and are not labor force participants. Compared to the younger women, the elderly are more likely to be rural residents, to have lower educational attainment, and to be white.

Our analyses of the determinants of poverty reveals consistent trends that cross the age division. For example, small town and rural women are more likely to be poor than are central city women, who are more often poor than suburban women. Nonwhite women are more likely to be poor than white women. Larger proportions of widows than single women are poor. All of these characteristics, and more, are true for women of all ages. The distinction to be made is that, without exception, the rates of poverty are higher for women over age 65 - sometimes the rates are twice those for younger women. And poverty among the elderly increases with age to a high of 63 percent for women age 90 and older who are living alone.

When we place a series of characteristics in a multivariate regression model to explain poverty, we find all the characteristics mentioned previously contribute to the model. Education was particularly important, with those with a high school diploma or more education having lower levels of poverty. The most important variable in the model, however, was source of income, coded differently for younger and older women. Among the younger women, having wages or a salary was related to not being poor; for older women, having more than one source of income is most important in terms of not being poor.

The ways in which women become poor are diverse, and have been well-covered in the literature. Although labor force participation is related to lower poverty levels, in and of itself it is no guarantee of release from poverty. It is well known that women's wages are lower than men's for comparable work, women are more likely to work part time and are less likely to have retirement benefits. It is also well known that most women tend to be employed in a few specific occupations that have low wage scales, e.g., saleswomen, clerks, service workers. In the long run, many women who are inadequately covered by pensions and retirement plans will become poor elderly women. Women who have been economically dependent on husbands and subsequently divorced often have no claim to pensions or Social Security benefits deriving from the former husband's employment. We also noted that women who depend solely on Social Security benefits are very likely to live in poverty.

This analysis cannot address questions about change over time. Some women remove themselves from poverty at times by marrying or living with an employed person. Other women augment their education and employment skills,

then re-enter the labor force. Still others sell valuable assets such as real estate. We do not know how many women exit from the poverty population through these means and others.

We noted that poverty rates increased at the older ages. The rates are also extremely high for women under the age of 20. This is a group that is numerically relatively small, but in which two out of three women are likely to live in poverty. They may be a diverse group, too young and perhaps too poorly educated to earn a wage above the poverty level, living alone as strangers in an unfamiliar city in some cases, perhaps alone in preference to a dismal family home. Along with the women who have no regular source of income, these young women are an interesting group for further study.

We cannot reduce the determinants of poverty to simple economic facts. True, being poor means not having enough money to live on - but a very important question is, how did this person become poor? And, equally important, what options does this person have for leaving poverty? Younger women, theoretically, still have courses open to them: increase their personal skills through education and employment; change marital status; try to plan for retirement income. Social and educational programs can be specifically directed at this group, such as, displaced homemakers programs, vocational and career counseling. Older women have few options; their possibilities of changing marital status, retirement benefits, or labor force participation are nill. The elderly woman who does not have multiple sources of income is not likely to change this over time. Government programs aimed at the elderly poor often fall short of raising the very old out of poverty.

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Table 1
AGE DISTRIBUTION OF WOMEN LIVING ALONE

Age	Number	Percent
15-19	77	0.6
20-29	1,667	12.8
30-39	994	7.6
40-49	764	5.8
50-59	1,701	13.0
60-69	3,010	23.1
70-79	3,250	24.8
80-89	1,472	11.3
90+	131	1.0
TOTAL	13,066	100.0

Table 2
CHARACTERISTICS OF WOMEN LIVING ALONE BY AGE

Characteristic	Total		Under Age 65		Age 65+	
	Number	Percent	Number	Percent	Number	Percent
Residence						
Central City	5,165	39.5	2,841	43.5	2,324	35.6
Suburb	3,659	28.0	1,963	30.1	1,696	25.9
Small Town	1,942	14.9	802	12.3	1,141	17.5
Rural	2,300	17.6	924	14.2	1,375	21.0
Race						
White	11,496	88.0	5,505	84.3	5,991	91.7
Nonwhite	1,570	12.0	1,025	15.7	545	8.3
Marital Status						
Single	3,031	23.2	2,518	38.6	513	7.8
Div/Sep/Mar, sp ab	2,938	22.5	2,285	35.0	653	10.0
Widowed	7,097	54.3	1,726	26.4	5,371	82.2
Education						
Less than 5 years	590	4.5	118	1.8	471	7.2
5 - 8	2,901	22.2	619	9.5	2,282	34.9
9 - 11	2,116	16.2	913	14.0	1,203	18.4
High School grad	3,631	27.8	2,202	33.7	1,429	21.9
Some college	1,941	14.9	1,302	20.0	640	9.8
College grad	1,889	14.4	1,377	21.1	511	7.8
Employed in 1979						
Employed	5,331	40.8	4,770	73.0	560	8.6
Unemployed	211	1.6	187	2.9	24	0.4
Not in Labor Force	7,524	57.6	1,572	24.1	5,952	91.1
TOTAL	13,066	100.0	6,530	100.0	6,536	100.0

Table 3
OCCUPATIONAL AND INDUSTRIAL DISTRIBUTION OF WOMEN LIVING ALONE WHO WORKED IN 1979 BY URBAN-RURAL RESIDENCE

	Total (%)	Urban (%)	Rural (%)
Occupation			
Manager, Professional Specialty	26.1	27.6	22.5
Technical, Sales, Administrative Support	41.4	44.8	33.2
Service	18.6	16.4	24.7
Farm, Forestry, Fishing	0.7	0.2	2.1
Precision Production, Crafts, Repair	2.3	2.4	2.2
Operator, Fabricator, Laborer	10.1	8.2	15.0
No Information	0.4	0.4	0.5
Occupation Total	99.6	100.0	100.2
Industry			
Agriculture, Forestry, Fishery, Mining	1.4	0.8	3.1
Construction	1.1	1.3	0.8
Manufacturing	16.1	15.5	17.5
Transportation/Communication	4.4	4.8	3.2
Trade	18.8	18.7	19.2
Finance, Insurance, Real Estate	7.4	8.7	3.9
Services	43.6	42.8	45.9
Public Administration	6.9	7.1	6.1
No Information	0.4	0.4	0.5
Industry Total	100.1	100.1	100.2

Table 4
SOURCES OF INCOME REGULARLY RECEIVED

Source	Under Age 65		Age 65+	
	% Receiving	% Sole Source	% Receiving	% Sole Source
Wage, salaries, tips	76.7	40.6	12.4	1.2
Own nonfarm business	3.3	0.7	1.3	0.1
Own farm	0.9	0.1	1.5	0.0
Interest, dividends, net rent	37.1	1.6	47.3	1.1
Social Security	13.5	3.4	88.1	25.5
Public assistance	6.2	3.3	12.9	2.9
Other (pensions, alimony, other regular income)	13.4	2.2	25.3	1.2
No regular source	2.8	2.8	2.0	2.0

Table 5
POVERTY STATUS OF WOMEN WHO LIVE ALONE, BY RESIDENCE

Poverty Level	Central City	Suburb	Small Town	Rural
Less than 100%	25.1	16.8	31.3	35.1
100 - 124%	10.2	11.1	11.7	11.7
125 - 199%	18.3	18.5	21.8	20.5
200% or more	46.4	53.6	35.2	32.7
Total	100.0	100.0	100.0	100.0

Table 6
PROPORTION IN POVERTY* BY SELECTED CHARACTERISTICS
AND AGE FOR WOMEN WHO LIVE ALONE

	Under Age 65		Age 65+	
	Number	% in Poverty	Number	% in Poverty
Residence				
Central City	2,841	26.4	2,324	46.1
Suburb	1,963	18.1	1,696	39.3
Small Town	802	32.8	1,141	50.1
Rural	924	32.9	1,375	56.2
Race				
White	5,505	23.0	5,991	44.0
Nonwhite	1,025	42.0	545	76.0
Marital Status				
Single	2,518	21.0	513	31.0
Div/Sep/Mar, sa	2,286	25.0	652	47.0
Widowed	1,726	34.0	5,371	49.0
Education				
Less than 5 years	118	61.4	472	74.0
5 - 8	619	55.4	2,282	61.0
9 - 11	913	43.2	1,203	48.9
High School grad	2,202	20.8	1,429	36.2
Some college	1,302	18.6	639	26.7
College grad	1,377	11.7	512	12.8
Employed in 1979				
Employed	4,771	14.0	560	18.0
Unemployed	187	43.0	24	51.0
Not in Labor Force	1,572	61.0	5,952	50.0
Total	6,530	25.5	6,536	47.1

* Less than 125% of poverty threshold.

Table 7
COMBINATIONS OF INCOME SOURCES FOR WOMEN LIVING ALONE BY AGE

	Number	Percent in Poverty
Women Under Age 65		
No income source	177	100.0
Wages, salaries, tips only	2,643	17.1
Only one source, not wages	728	76.6
Wages in combination with any other sources	2,364	10.2
Combination of sources not including wages	618	39.3
TOTAL	6,530	25.6
Women Age 65 and Over		
No income source	127	100.0
Social Security only	1,665	84.7
Only one source, not Social Security	422	62.8
Social Security in combination with any other sources	4,088	30.0
Combinations of sources not including Social Security	234	22.2
TOTAL	6,536	47.2

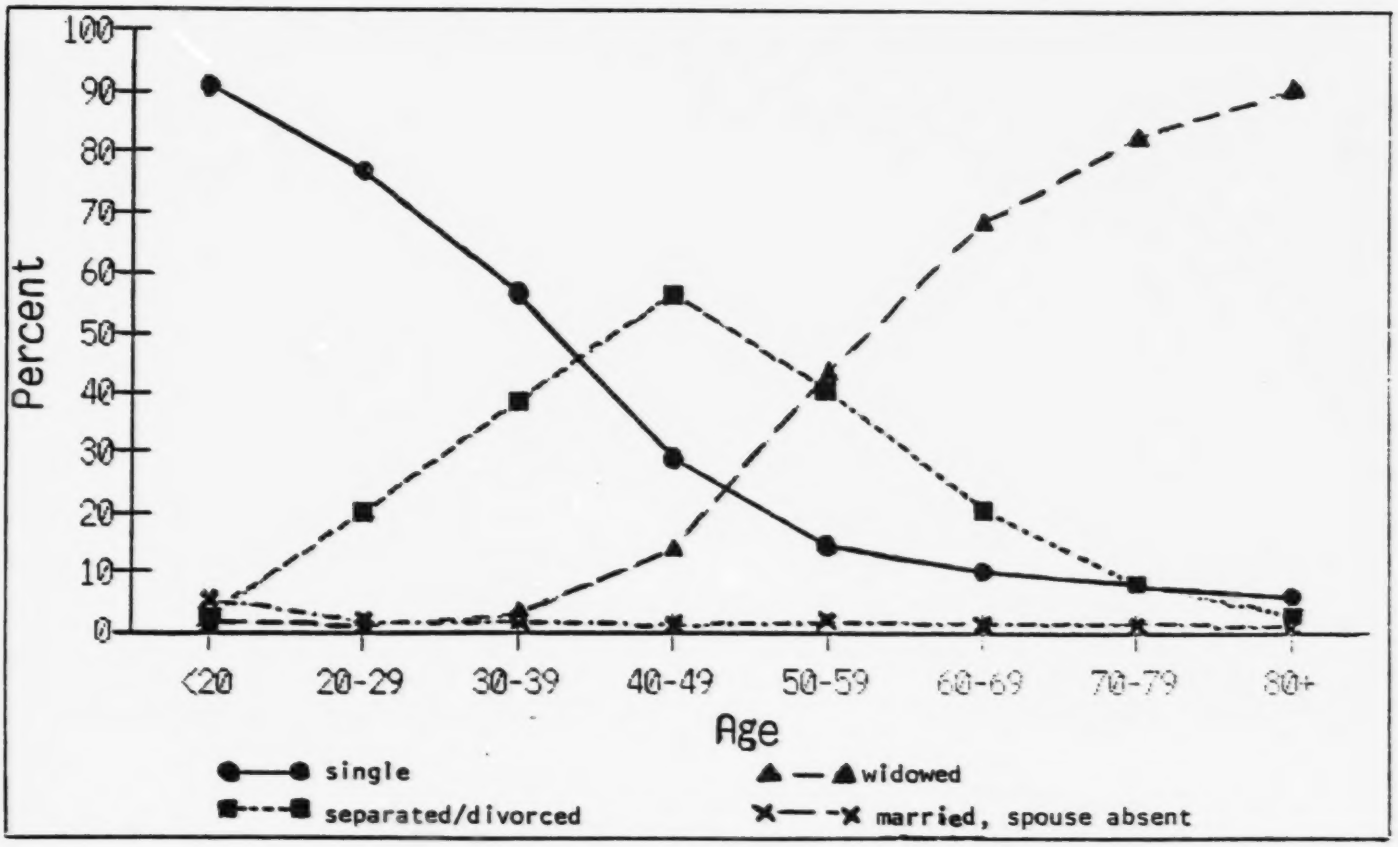
Table 8
MULTIPLE CLASSIFICATION ANALYSIS OF THE
POVERTY STATUS OF WOMEN WHO LIVE ALONE

Characteristic	Number	Unadjusted Deviation From Mean	Adjusted Deviation from Mean	Beta
		Women under 65 years old (N = 6,530. Grand Mean = 26%)		
Residence				
Central City	2,841	0.01	0.00	
Suburb	1,963	-0.08	-0.03	
Small Town	802	0.07	0.04	
Rural	924	0.07	0.04	
				0.06
Age				
Less than 20	77	0.42	0.36	
20-29	1,667	-0.04	0.06	
30-39	994	-0.13	-0.03	
40-49	764	-0.03	-0.03	
50-59	1,701	0.03	-0.03	
60-64	1,326	0.10	-0.02	
				0.13
Race				
White	5,505	-0.03	-0.01	
Nonwhite	1,025	0.16	0.06	
				0.06
Marital Status				
Single	2,518	-0.05	0.00	
Div/Sep/Mar, sp ab	2,286	-0.01	0.01	
Widow	1,726	0.09	-0.01	
				0.02
Education				
Less than 5	118	0.36	0.17	
5-8	619	0.30	0.16	
9-11	913	0.18	0.10	
High School Grad	2,202	-0.05	-0.03	
Some College	1,302	-0.07	-0.04	
College Grad	1,377	-0.14	-0.07	
				0.18
Income Source				
No Source	177	0.74	0.69	
Wage Only	2,643	-0.08	-0.09	
One Only, Not Wage	727	0.51	0.46	
Wage Plus Other	2,410	-0.15	-0.12	
Other Combinations	573	0.15	0.13	
				0.50
Multiple R Squared				0.351
Multiple R				0.593

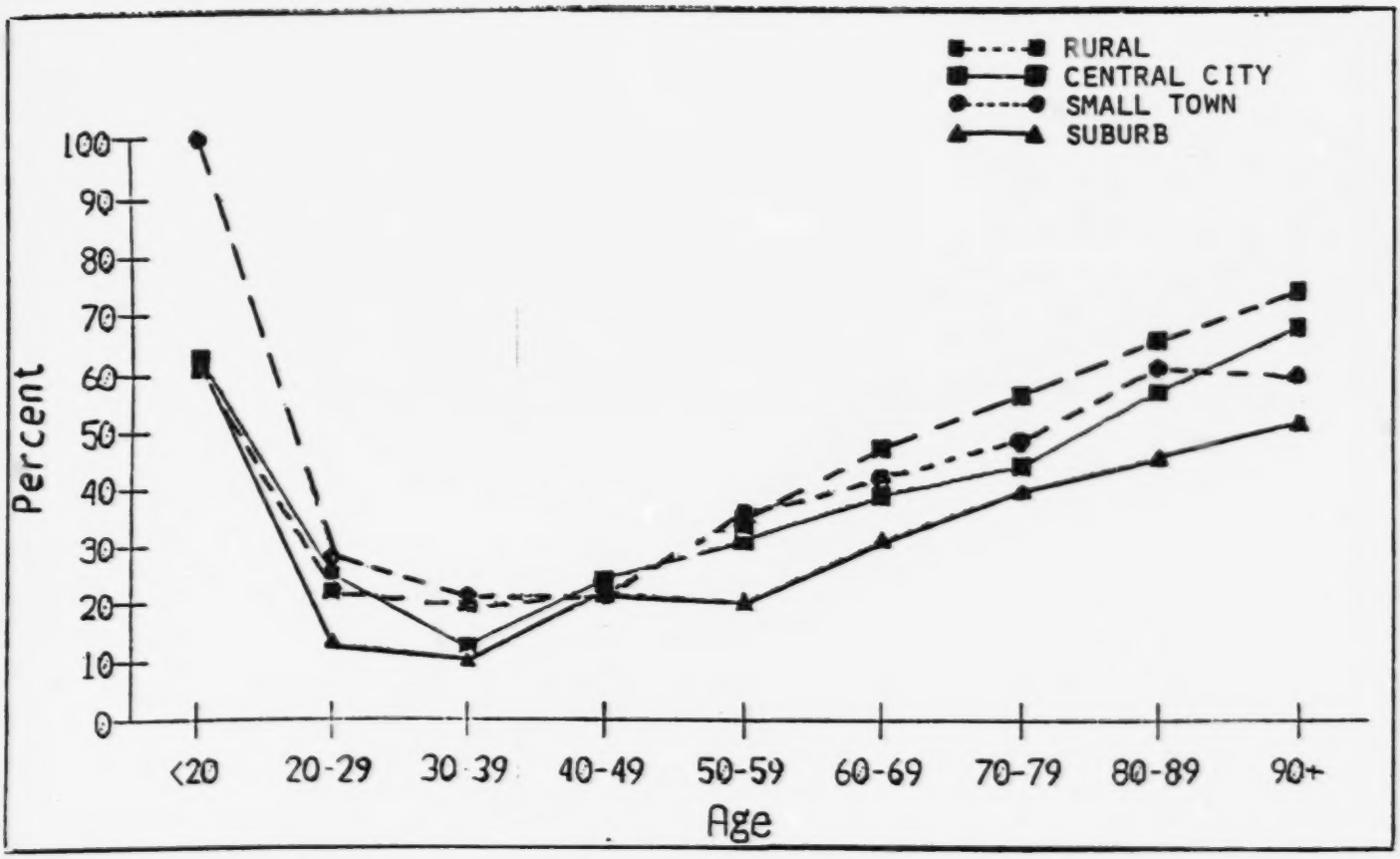
(Table 8 Continued)

Characteristic	Number	Unadjusted Deviation From Mean	Adjusted Deviation from Mean	Beta
		Women 65 years and older (N = 6,536. Grand Mean = 47%)		
Residence				
Central City	2,324	-0.01	-0.02	
Suburb	1,696	-0.08	-0.05	
Small Town	1,141	0.03	0.04	
Rural	1,375	0.09	0.07	
				0.09
Age				
65-90	1,683	-0.07	-0.02	
70-79	3,249	-0.01	-0.01	
80-89	1,472	0.09	-0.05	
90+	131	0.16	0.09	
				0.06
Race				
White	5,991	-0.03	-0.02	
Nonwhite	545	0.29	0.18	
				0.11
Marital Status				
Single	513	-0.16	-0.03	
Div/Sep/Mar, sp ab	652	-0.00	0.04	
Widow	5,371	0.02	0.00	
				0.03
Education				
Less than 5	472	0.27	0.13	
5-8	2,282	0.14	0.09	
9-11	1,203	0.02	0.01	
High School Grad	1,429	-0.11	-0.07	
Some College	639	-0.21	-0.13	
College Grad	512	-0.34	-0.22	
				0.21
Employed in 1979				
Employed	560	-0.29	-0.15	
Unemployed	24	0.04	0.07	
Not in LF	5,952	0.03	-0.01	
				0.09
Income Source				
No Source	127	0.53	0.49	
Social Security Only	1,665	0.38	0.32	
One Only, Not Social Security	422	0.16	0.12	
Social Security plus Other	4,091	-0.17	-0.15	
Other Combinations	232	-0.26	-0.16	
				0.44
Multiple R Squared				0.344
Multiple R				0.586

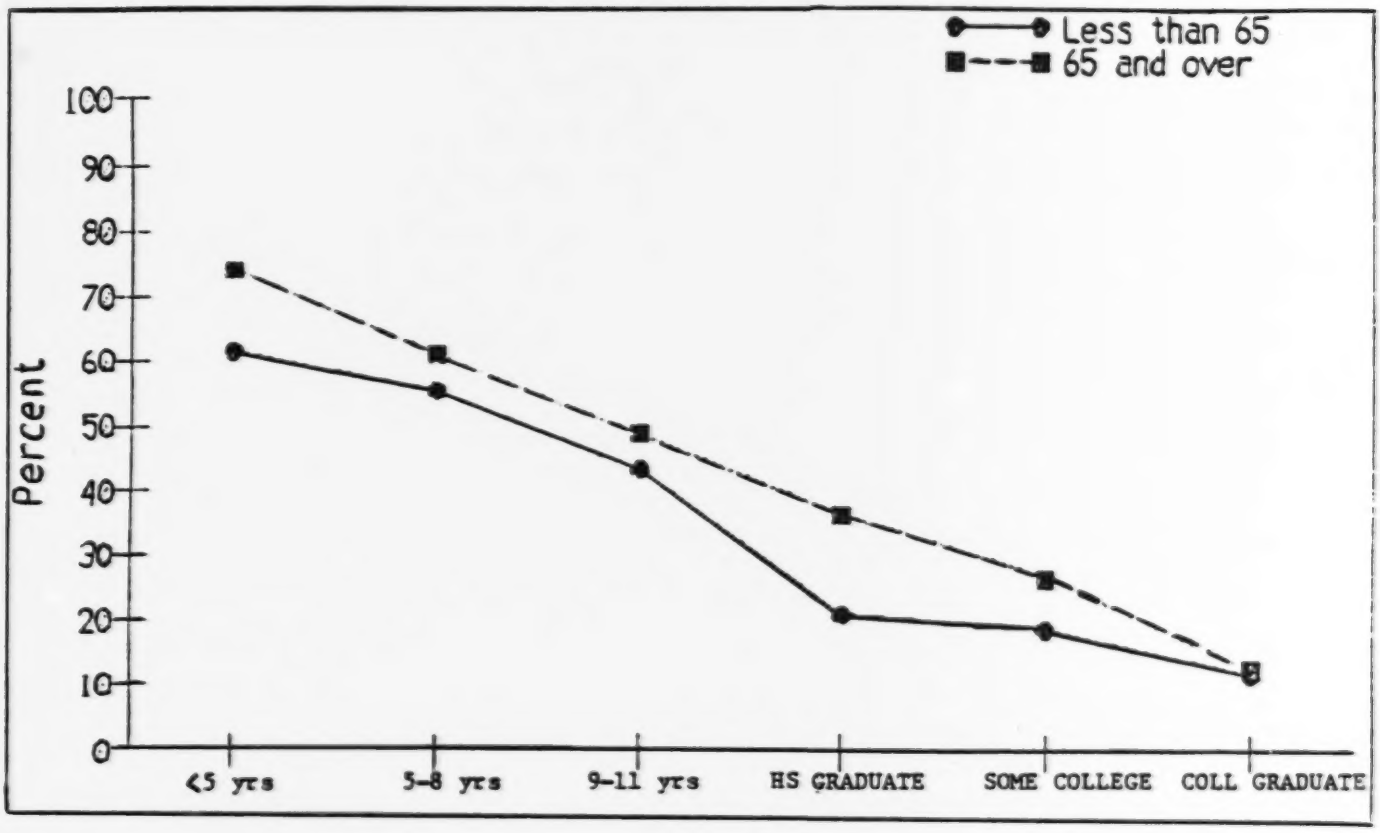
GRAPH 1. MARITAL STATUS BY AGE FOR WOMEN WHO LIVE ALONE



GRAPH 2. PROPORTION IN POVERTY BY AGE AND RESIDENCE



GRAPH 3. PROPORTION IN POVERTY BY EDUCATION AND AGE



GRAPH 4. PROPORTION IN POVERTY BY INCOME SOURCES AND AGE